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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,703	04/30/2001	Kenro Hama	018775-826	9401

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EXAMINER	
MENBERU, BENIYAM	
ART UNIT	**PAPER NUMBER**
2626	

DATE MAILED: 01/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/843,703	HAMA ET AL.	
	Examiner	Art Unit	
	Beniyam Menberu	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 October 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Arguments

1. Applicant's arguments filed October 31, 2005 have been fully considered but they are not persuasive. With regards to rejection of claims 1, 5, 8, 11, 14, and 17, U.S. Patent No. 6219382 to Kikuchi et al disclose of inputting still image (Kikuchi et al capture frames from video signal and analyzes pixels of digital picture (column 8, lines 29-31) . A frame is equivalent to a still image since consecutive still images form a video signal.(column 8, lines 29-60; column 26, lines 5-16)) and detecting specific color in still image (column 12, lines 48-55).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 5, 8, 11, 14, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6219382 to Kikuchi et al.

Regarding claims 1, 5, 8, 11, 14, and 17 Kikuchi et al discloses an image processor, method, and program (column 6, lines 25-27) comprising:

a first decision controller, method and program , which decides whether input color data of a target pixel exist in first ranges (column 12, lines 46-51);

a second decision controller which decides whether differences between color data of the target pixel and those of pixels adjacent thereto exist in second ranges different from the first ranges (column 12, lines 51-55); and

a color decision controller which decides that the target pixel has a specified color when the first decision controller decides that the color data of the target pixel exist in the first ranges and the second decision controller decides that the differences exist in the second ranges (column 12, lines 54-58).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 2, 3, 6, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6219382 to Kikuchi et al in view of U.S. Patent No. 6631210 to Mutoh et al.

Regarding claims 2, 6, and 9, Kikuchi et al teaches all the limitations of claim 1, 5, and 8 respectively. However Kikuchi et al does not disclose an image processor, method, and program according to claim 1, wherein said second decision controller determines a maximum value among differences of color data between the target pixel and the adjacent pixels thereof and decides whether the maximum value exists in the second ranges.

Mutoh et al disclose an image processor, method, and program, wherein said second decision controller determines a maximum value among differences of color data between the target pixel and the adjacent pixels thereof and decides whether the maximum value exists in the second ranges (column 32, lines 24-32).

Kikuchi et al and Mutoh et al are combinable because they are in the similar problem area of color detection.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the maximum value detection of Mutoh et al with the system of Kikuchi et al to implement accurate color detection system.

The motivation to combine the reference is clear because Mutoh et al teaches that this maximum value can be used in detection of deep color area (column 32, lines 38-46).

Regarding claim 3, Kikuchi et al teaches all the limitations of claim 1. Further Mutoh et al disclose an image processor, further comprising an edge detector which calculates differences in a plurality of color component data of the color data between the target pixel and the adjacent pixels thereof in a direction and decides a position of an edge based on the differences (column 37, lines 14-28; column 47, lines 42-50).

6. Claims 4, 7, 10, 13, 16, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6219382 to Kikuchi et al in view of U.S. Patent No. 6115494 to Sonoda et al.

Regarding claims 4, 7, 10, 13, 16, and 19, Kikuchi et al teach all the limitations of claims 1, 5, 8, 11, 14, and 17 respectively. However, Kikuchi et al does not disclose an image processor, program and method, further comprising:

an extraction controller which extracts an element having a predetermined shape based on the decision by said color decision controller; and

a pattern detector which detects a specified pattern the image data by discriminating whether the elements extracted by said extraction controller have a predetermined relationship between them.

Sonoda et al disclose an image processor, program and method, further comprising:

an extraction controller which extracts an element having a predetermined shape based on the decision by said color decision controller (Figure 5, reference 13a,b; column 10, lines 54-65); and

a pattern detector which detects a specified pattern the image data by discriminating whether the elements extracted by said extraction controller have a predetermined relationship between them (Figure 5, reference 17; column 14, lines 30-44).

Kikuchi et al and Sonoda et al are combinable because they are in the similar problem area of color detection.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the extraction controller and the pattern detector taught by Sonoda et al into the system of Kikuchi et al to implement a pattern detection system.

The motivation to combine the reference is clear because for pattern detection it is necessary to implement the system of Sonoda et al in addition to the color detection system of Kikuchi et al.

7. Claims 12, 15, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6219382 to Kikuchi et al in view of U.S. Patent No. 6151410 to Kuwata et al.

Regarding claims 12, 15, 18, Kikuchi et al teach all the limitations of claims 11, 14, and 17 respectively. However Kikuchi et al does not disclose an image processor, method, and program wherein the color data includes a plurality of color component data and said second decision controller calculates differences between the color component data of the target pixel and decides whether the differences exist in the second ranges.

Kuwata et al disclose an image processor, method, and program wherein the color data includes a plurality of color component data and said second decision controller calculates differences between the color component data of the target pixel and decides whether the differences exist in the second ranges (Figure 12, reference S302-S308; column 22, lines 14-36).

Kikuchi et al and Kuwata et al are combinable because they are in the similar problem area of color detection.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the color component difference calculation and

comparison taught by Kuwata et al with the system of Kikuchi et al to implement an accurate color/pattern detection system.

The motivation to combine the reference is clear because Kuwata et al teaches that the method of calculating difference between color components can be used for thinning process (column 22, lines 21-23).

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beniyam Menberu whose telephone number is (571) 272-7465. The examiner can normally be reached on 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on (571) 272-7471. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (571) 272-2600. The group receptionist number for TC 2600 is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

Beniyam Menberu

BM

12/29/2005

KA Williams

KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER